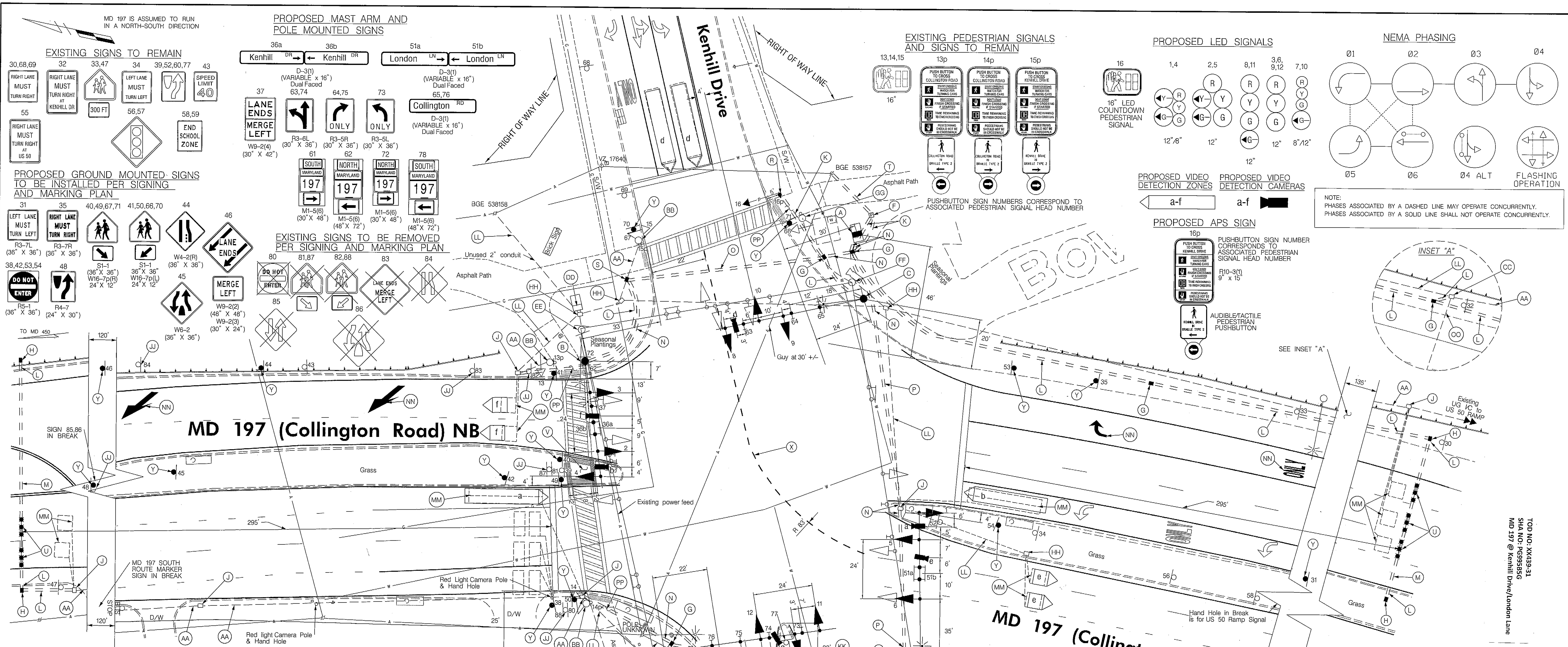

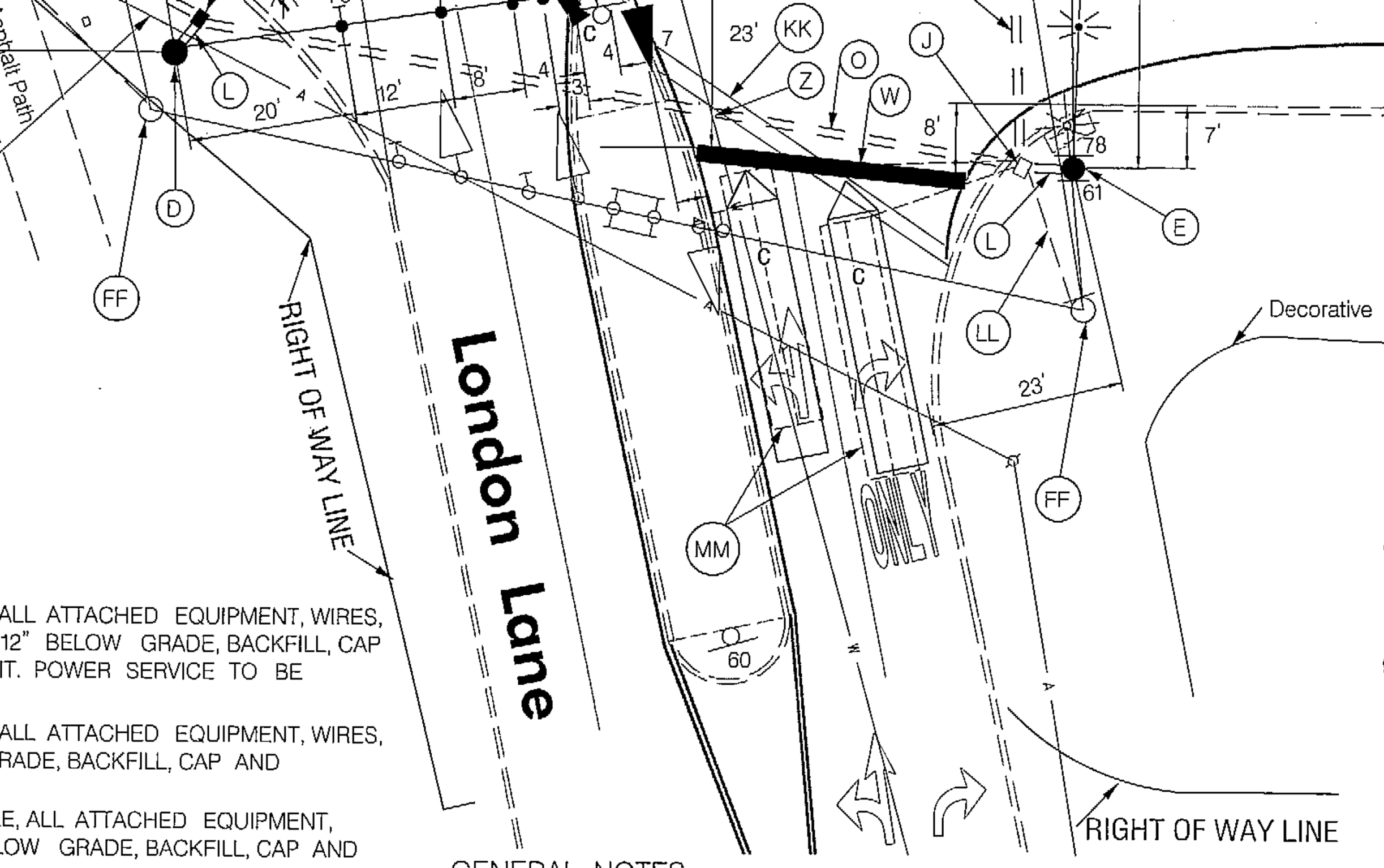

CONSTRUCTION DETAILS MD 197 AT KENHILL DRIVE/LONDON LANE

A. INSTALL NEMA SIZE "S" BASE MOUNTED CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT (NOTE: 2-2" AND 2-4" SCHEDULE 80 PVC 90° BENDS.)
B. INSTALL 27' STEEL POLE WITH 50' MAST ARM, TRAFFIC SIGNAL HEADS, VIDEO DETECTION CAMERAS, SIGNS, 20' LIGHTING ARM AND LED LUMINAIRE (NOTE: 1-3" AND 1-2" SCHEDULE 80 PVC 90° BEND.)
C. INSTALL 27' STEEL POLE WITH 60' MAST ARM, TRAFFIC SIGNAL HEADS, VIDEO DETECTION CAMERAS, SIGNS, 20' LIGHTING ARM AND LED LUMINAIRE (NOTE: 1-3" AND 1-2" SCHEDULE 80 PVC 90° BEND.)
D. INSTALL 27' STEEL POLE CUT TO 21' WITH 70' MAST ARM, TRAFFIC SIGNAL HEADS AND SIGNS. (NOTE: 1-3" AND 1-2" SCHEDULE 80 PVC 90° BEND.)
E. INSTALL 27' STEEL POLE WITH 70' MAST ARM, TRAFFIC SIGNAL HEADS, VIDEO DETECTION CAMERAS, SIGNS, 20' LIGHTING ARM AND LED LUMINAIRE (NOTE: 1-3" AND 1-2" SCHEDULE 80 PVC 90° BEND.)
F. INSTALL EMBEDDED METERED SERVICE PEDESTAL (100 AMP) (NOTE: 1-4" AND 3-2" SHEDULE 80 PVC 90° BENDS.)
G. INSTALL ELECTRICAL HANDHOLE.
H. INSTALL ELECTRICAL HANDHOLE WITH LONG EDGE PERPENDICULAR TO THE ROADWAY FOR NONINVASIVE DETECTOR INSTALLATION.
J. ADJUST HANDHOLE TO GRADE WITH NEW FRAME AND COVER.
K. INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
L. INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
M. INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.
N. INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
O. INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED.
P. INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.
R. INSTALL 10' PEDESTAL POLE WITH BREAKAWAY COUPLINGS PER MD 801.01-01, PEDESTRIAN SIGNAL HEAD, AND AUDIBLE PUSHBUTTON STATION (NOTE: USE MODIFIED FOUNDATION PER MD 801.01 WITH 1-2" SCHEDULE 80 90° PVC BEND.)
S. TEST PIT TO LOCATE EXISTING CONDUIT FROM PEDESTAL POLE AND REMOVE EXISTING PEDESTRIAN SIGNAL CABLES, INSTALL HANDHOLE ON EXISTING CONDUIT, CAP AND ABANDON REMAINING EXISTING CONDUIT. (SEE GENERAL NOTE #10.)
T. INSTALL 4 INCH SCHEDULE 80 PVC CONDUIT BORED TO BASE OF BGE UTILITY POLE # 538157 FOR ELECTRICAL SERVICE. STUB OUT 1' AND INSTALL PULL STRING.
U. INSTALL NONINVASIVE DETECTOR CENTERED IN LANE.
V. REMOVE EXISTING MEDIAN CUT-THROUGH AND INSTALL STREET LEVEL MEDIAN CUT-THROUGH WITH 8' WIDE LEVEL AREA, PER MD 655.21, WITH TWO DETECTABLE WARNING SURFACES PER MD 655.40 AS SHOWN.
W. INSTALL 24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING MATERIAL FOR STOP LINE, AS SHOWN.
X. INSTALL 3'-3' SKIP LINE USING 5" WHITE HEAT APPLIED PERMANENT PAVEMENT MARKING MATERIAL, AS SHOWN.
Y. INSTALL GROUND MOUNTED SIGN, SEE SIGNING AND MARKING PLAN SHEET SN-2.1.
Z. TEST PIT REQUIRED FOR BORE.
AA. USE EXISTING CONDUIT, REMOVE UNUSED CABLES.
BB. REMOVE PEDESTRIAN SIGNAL CABLES AND APS PUSHBUTTON CABLES FROM PEDESTAL POLE, AND INSTALL NEW CABLES TO NEW CABINET, SEE GENERAL NOTE #10.
CC. USE EXISTING HANDHOLE, INSTALL NEW FRAME AND COVER, AND PULL BACK EXISTING INTERCONNECT CABLE FROM CABINET AND RE-ROUTE TO NEW CABINET.
DD. REMOVE EXISTING CONTROLLER/CABINET, EQUIPMENT, AND FOUNDATION 12" BELOW GRADE, BACKFILL, CAP AND ABANDON EXISTING CONDUIT.
EE. REMOVE EXISTING STRAIN POLE, ALL ATTACHED EQUIPMENT, WIRES, POWER FEED, AND FOUNDATION 12" BELOW GRADE, BACKFILL, CAP AND ABANDON EXISTING CONDUIT. POWER SERVICE TO BE REMOVED BY OTHERS.
FF. REMOVE EXISTING STRAIN POLE, ALL ATTACHED EQUIPMENT, WIRES, AND FOUNDATION 12" BELOW GRADE, BACKFILL, CAP AND ABANDON EXISTING CONDUIT.
GG. REMOVE EXISTING PEDESTAL POLE, ALL ATTACHED EQUIPMENT, WIRES, AND FOUNDATION 12" BELOW GRADE, BACKFILL, CAP AND ABANDON EXISTING CONDUIT.
HH. REMOVE EXISTING HANDHOLE, REMOVE UNUSED CABLES FROM CONDUIT, CAP AND ABANDON CONDUIT, BACKFILL WITH SUITABLE MATERIAL.
JJ. REMOVE GROUND MOUNTED SIGN AND SUPPORT, SEE SIGNING AND MARKING PLAN.
KK. REMOVE EXISTING PAVEMENT MARKING LINE.
LL. CAP AND ABANDON EXISTING CONDUIT. REMOVE UNUSED CABLES.
MM. ABANDON EXISTING VEHICLE DETECTORS.
NN. INSTALL PAVEMENT MARKING LEGEND OR SYMBOL, SEE SIGNING AND MARKING PLAN.
OO. EXISTING CONDUIT TO REMAIN.
PP. BORE CONDUIT UNDER SIDEWALK.

GEOMETRIC LEGEND

= = = = = =	EXISTING
═══════	PROPOSED

UTILITY LEGEND

—A—	AERIAL CABLES
—E—	ELECTRICAL CABLES
—F—	FIBER OPTIC
—G—	GAS MAIN
—S—	SEWER MAIN
—SD—	STORM DRAIN
—T—	TELEPHONE CABLES
—W—	WATER MAIN

BY: mhusselbee

GENERAL NOTES

1. VIDEO CAMERA LOCATION AND ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
2. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
3. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH SHA STANDARDS.
4. ALL SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH SHA STANDARDS.
5. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
6. ALL NEW LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINAL AND PROPERLY LABELING EACH CABLE.
8. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING THE PROPOSED SIGNAL EQUIPMENT. IF UTILITY CONFLICTS ARISE, THE CONTRACTOR SHALL CONTACT THE SHA ENGINEER.
9. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, AND THE HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO INSTALLATION OF ALL SIGNAL EQUIPMENT.
10. THE CONTRACTOR SHALL NOTIFY THE SHA ENGINEER OF ANY WORK WHICH AFFECTS THE OPERATION OF THE EXISTING PEDESTRIAN SIGNALS 48 HOURS PRIOR TO BEGINNING WORK.
11. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF BOWIE POLICE DEPARTMENT FOR RED LIGHT CAMERA EQUIPMENT INSTRUCTIONS. CONTACT CHIEF JOHN NESKY 301-575-2015
12. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
13. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18 INCHES FROM A FIVE FOOT X FIVE FOOT LEVEL LANDING AREA WITH A CROSS SLOPE NO GREATER THAN 2%.
14. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTON MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.08 AND 4E.10 AND FIGURES 4E-3 AND 4E-4, AND THE NCHRP PUBLICATION "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED AND APPROVED BY THE DIRECTOR OF THE OFFICE OF TRAFFIC & SAFETY.

TOD NO: XX439-31
SHA NO: PG995B5G
MD 197 @ Kenhill Drive/London Lane

WAE Williams Associates Engineers
Williams Associates-Engineers, P.A.
777 State Rte. 3N, Suite D
Gambrills, Maryland 21054
Phone: 410-729-1004
Facsimile: 410-729-1009

APPROVALS	
TEAM LEADER	
ASST. DIV. CHIEF	
DIVISION CHIEF	
OFFICE DIRECTOR	

ORIGINAL ON FILE

REVISIONS	
	(F) RECONSTRUCTION FROM STRAIN POLES TO MAST ARMS, VIDEO DETECTION. APRIL 2013 SHA NO. XX4395185 TIMS No. J903
WAE	MEF CJW
	E. INSTALL APS AND PEDESTRIAN SIGNALS FOR NORTH AND EAST LEGS. 1/2007 SHA NO. AT7825185 H432
STV	
	D. INSTALL FAR-SIDE SAMPLING LOOP DETECTORS ON MD-197 12-4-91 SHA NO. P-410-503-372
DJD	

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 197 (COLLINGTON ROAD)
AT KENHILL DRIVE /LONDON LANE
BOWIE, MARYLAND

TRAFFIC SIGNAL PLAN

SCALE 1" = 20' ADVERTISED DATE JAN 1982 CONTRACT NO. AW-527-452-385

DESIGNED BY	JDR	COUNTY	PRINCE GEORGE'S
DRAWN BY	GWS	LOGMILE	16019701.90
CHECKED BY	REH	TIMS NO.	
F.A.P. NO.		TOD NO.	

TS NO. 7 F | DRAWING SG-1 OF 2 | SHEET NO. 1 OF 3

PLOTTED: Thursday, May 02, 2013 AT 11:18 AM
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